The ability to purge the sample point ensures optimal retrieval of a representative, contamination free sample. The S32-LG type samplers provide a system purge in addition to sampling in a sample cylinder with a predefined filling rate. The predefined filling rate is achieved by using an expansion chamber. The unique design offers a one handle operation by multiple valves. These features provide sample accuracy and safety. This sampler type is suitable for liquefied gases and liquids.

**OPERATION/FUNCTION**

1. **0 - off**
   - Install the sample cylinder and connect the flexible hose to the bottom side of the sample cylinder. Open the needle valves of the sample cylinder.

2. **1 - system purge**
   - Turn the handle to the “process” position, allowing the sample cylinder to be filled. To ensure representative sampling, this position can be held for any required time.

3. **2 - expansion**
   - Turn the handle to the “expansion” position. The internal connection between the sample cylinder and the expansion chamber has now been made. Maintain this position for any required time to enable the fluid to divide over the sample cylinder and expansion chamber. Close the two needle valves of the sample cylinder.

4. **3 - vent**
   - Open the valve on the expansion chamber. The expansion chamber and connections are being depressurised to the vent system. Release the handle to close the valve.

5. **4 - off**
   - Turn the handle to the “off” position. Disconnect the flexible hose. Remove the sample cylinder and connect the flexible hose to the top quick connect coupling.

**TYPICAL P & ID**

![Typical P & ID Diagram]

System purge configuration (F1)
3 FEATURES/ADVANTAGES/PROPERTIES

☐ Sampling in cylinder with predefined filling rate
☐ Representative sampling
☐ Zero dead volume
☐ Closed sampling
☐ One-handle operation of multiple valves
☐ Purging of sampler
☐ No direct connection between vent line and process lines
☐ Depressurisation of quick connect couplings
☐ No outage tube needed

4 BASIC SPECIFICATIONS

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td>SS316, SS316L</td>
</tr>
<tr>
<td>Cylinder Type</td>
<td>500cc cylinder</td>
</tr>
<tr>
<td>Expansion Chamber</td>
<td>100cc (20% of sample volume)</td>
</tr>
<tr>
<td>Valve</td>
<td>Three-way ball valve type W83. PTFE seats, Viton A O-rings. Pressure range 103 bar @ 20°C (1500 psig @ 70°F). Temperature range -17/+232°C (0/+450°F).</td>
</tr>
<tr>
<td>Operation</td>
<td>Manual.</td>
</tr>
<tr>
<td>Connections</td>
<td>1/4&quot; FNPT. Regulator, pressure gauge and check valve included.</td>
</tr>
</tbody>
</table>

Please note: the above is a basic specification only. DOPAK® Samplers can be offered with a wide variety of options as mentioned below.

5 OPTIONS

☐ Spring return handle
☐ Lockable handle
☐ Pipe stand
☐ Block valve
☐ Flow meter
☐ Enclosure
☐ Sample cooler
☐ Exotic materials
☐ Larger/smaller sample size

For more information please refer to our sheets:
Options for DOPAK® process sampler, sampling into a cylinder.
Components for DOPAK® process samplers.

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